Amendments to the Claims

The listing of claims below is intended to replace all prior listings of the claims in the present application.

1-67 (canceled)

68. (presently amended) A method of regulating protein kinase C activity comprising:

contacting protein kinase C with a mammalian biliverdin reductase, exam active a fragment or variant thereof with protein kinase C regulatory activity, or a polypeptide comprising the amino acid sequence of SEQ ID NO: 16 or 17, under conditions effective to regulate protein kinase C activity.

- 69. (previously added) The method according to claim 68, wherein the protein kinase C is a human protein kinase C.
- 70. (previously added) The method according to claim 69, wherein the human protein kinase C is selected from the group of protein kinase C isozymes α , β , and γ .
- 71. (previously added) The method according to claim 68, wherein said contacting is carried out with rat or human biliverdin reductase.
- 72. (presently amended) The method according to claim 71, wherein the biliverdin reductase is human biliverdin reductase comprising an amino acid sequence according to SEQ. ID. No. SEQ ID NO: 1 or SEQ. ID. No. SEQ ID NO: 3.
- 73. (presently amended) The method according to claim 68, wherein said contacting is carried out with a fragment of rat biliverdin reductase comprising an amino acid sequence according to SEQ. ID. No. 18 or SEQ. ID. No. 19 or a fragment of human biliverdin reductase comprising an amino acid sequence according to SEQ. ID. No. 34 or



SEQ. ID. No. 35 a polypeptide comprising the amino acid sequence of SEQ ID NO: 16 or 17.

- 74. (presently amended) The method according to claim ± 68 , wherein said contacting is carried out in the a cell.
- 75. (previously added) The method according to claim 74, wherein the cell is *in vivo*.
- 76. (previously added) The method according to claim 74, wherein the cell is *in vitro*.
- 77. (new) The method according to claim 68, wherein said contacting is carried out with a polypeptide comprising the amino acid sequence of SEQ ID NO: 18, 19, 34, or 35.

